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# A CATALOG OF THE COLEOPTERA OF AMERICA NORTH OF MEXICO

FAMILY: CIIDAE

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UNITED STATES  
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HANDBOOK  
NUMBER 529-105

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FAMILIES OF COLEOPTERA IN AMERICA NORTH OF MEXICO

<i>Fascicle</i> <sup>1</sup> Family	Year issued	<i>Fascicle</i> <sup>1</sup> Family	Year issued	<i>Fascicle</i> <sup>1</sup> Family	Year issued
1 Cupedidae -----	1979	45 Chelonariidae -----		98 Endomychidae -----	
2 Micromalthidae -----		46 Callirhipidae -----		100 Lathridiidae -----	
3 Carabidae -----		47 Heteroceridae -----	1978	102 Biphyllidae -----	
4 Rhysodidae -----		48 Limnichidae -----		103 Byturidae -----	
5 Amphizoidae -----		49 Dryopidae -----		104 Mycetophagidae -----	
6 Haliplidae -----		50 Elmidae -----		105 Ciidae -----	1982
8 Noteridae -----		51 Buprestidae -----		107 Prostomidae -----	
9 Dytiscidae -----		52 Cebrionidae -----		109 Colydiidae -----	
10 Gyrinidae -----		53 Elateridae -----		110 Monommatidae -----	
13 Sphaeriidae -----		54 Throscidae -----		111 Cephaloidea -----	
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42 Brachypsectridae -----		95 Cerylonidae -----		144 Stylopidae -----	
43 Artematopidae -----		96 Corylophidae -----		145 Fossil Coleoptera -----	
44 Ptilodactylidae -----		97 Coccinellidae -----			

<sup>1</sup> Missing numbers are those assigned in the computer program to families not found in the United States and Canada.

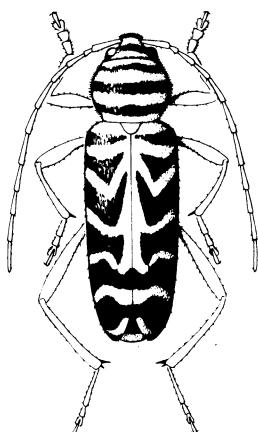
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# A CATALOG OF THE COLEOPTERA OF AMERICA NORTH OF MEXICO

*//* *=*

## FAMILY: CIIDAE

BY  
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UNITED STATES  
DEPARTMENT OF  
AGRICULTURE

AGRICULTURE  
HANDBOOK  
NUMBER 529-105

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## **FOREWORD**

Many species of beetles are important pests of agricultural crops, stored food products, forests, wood products and structures, and fabrics. Many other species, in contrast, are beneficial in the biological suppression of pest arthropods and weeds, as well as in the decomposition of plant detritus, animal carcasses, and dung. Part of our national responsibility to American agriculture is to provide correct identification of species of American beetles so that appropriate controls can be applied.

Most information about animal species, whether agricultural, biological, or experimental, is filed under the species' scientific names. These names are therefore the keys to retrieval of such information. Because some species have been known by several names, a complete listing of these names for each species is necessary.

For the user of scientific names, an up-to-date taxonomic catalog providing currently accepted names and pertinent bibliographic and distributional data is an indispensable tool. Although taxonomic literature is constantly changing to reflect current work, the traditional published taxonomic catalog remains static with updating left to the individual user until it is revised. Production of catalogs in the past has been laborious with long printing delays resulting in data that are obsolete before being published. However, the computer now provides the capability of storing, updating, and retrieving taxonomic data; rapid publication through computer-driven typesetting machinery; and a greater degree of currentness and flexibility.

All 124 fascicles in this catalog of the beetles of America north of Mexico are produced by an original group of computer programs, designed and written during a pilot project by personnel of the Systematic Entomology Laboratory, Agricultural Research Service, and the Communications and Data Services Division, Science and Education Management Staff.

The published information is stored on computer tape, is updated periodically to reflect taxonomic progress in the family, and is available in a data base for computer searching.



T. B. Kinney, Jr.  
Administrator  
Agricultural Research Service



## PREFACE

The Coleoptera, or beetles, are represented in the world by about 220,000 described species, of which about 24,000 occur in the United States and Canada. A comprehensive taxonomic catalog of beetles for this area has not been available except the series of world-based "Coleopterorum Catalogus" volumes (1909–present, Junk, Berlin). The Leng "Catalogue of the Coleoptera of America North of Mexico" (J. D. Sherman, Jr., Mt. Vernon, NY), which was published in 1920 with supplements to the end of 1947, is a checklist. However, it has served professional and amateur alike for nearly 60 years as the principal source of scientific names of beetles. Since 1947, many new taxa have been described and many changes in status and nomenclature have appeared in numerous scattered publications, but little effort has been made to summarize these changes.

This catalog will supplant the Leng catalog and supply additional essential information. It is produced by an original suite of storage, retrieval, and printing programs written especially for automated taxonomic catalogs.

The catalog for each family is published as a separate fascicle with its introductory text, bibliography, and index. Each family is numbered as listed, but the order of issuance of fascicles is not necessarily in numerical sequence. The publishing of separate fascicles makes data available shortly after they are assembled. Computer tapes for each fascicle are maintained for updating and necessary reprinting.

The information on each family is the responsibility of the respective author or authors. The editors modify it only to correct obvious errors and to make it conform to the requirements of the computer programs.

No original proposal for a new name, taxon, status, or classification is given, such data having been previously published, but new host and distributional data are often listed. The rules of "The International Code of Zoological Nomenclature" are followed.

The geographic scope of this catalog includes the continental United States, Canada, Alaska, Greenland, and the associated continental islands. Names of taxa found only in other regions are excluded. If the range of a species extends outside these geographic limits, this fact is indicated. Inside the back cover is a map of the 12 faunal regions based on historical and faunal criteria to simplify distribution recordings. Two-letter Postal Service style abbreviations are used for States and Provinces, and faunal regions are indicated in each distribution record by a diagonal line between groups of abbreviations.

It is not the purpose of this catalog to present a complete scheme of higher classification within the order. The familial makeup is somewhat intermediate between that of R. H. Arnett in "The Beetles of the United States" (1960–62, Catholic University Press, Washington, DC) and that of R. A. Crowson in "The Natural Classification of the Families of Coleoptera" (1967, Biddles Ltd., Guildford, England). Modifications of these two systems are largely those advocated by J. F. Lawrence based in part on suggestions by taxonomic specialists for certain families.

Generic groups and higher categories within the family are arranged phylogenetically as indicated by the author of the particular fascicle, and species group names with their respective synonyms are arranged alphabetically.

Names referable to incertae sedis and nomen dubium are listed separately at the end of the nearest applicable taxon with notations as to their status.

Each available name is followed by its author, date proposed, and page number referring to the complete bibliographic citation containing the original description. Following each generic name are

the type-species and method of its designation, necessary explanatory notes, and pertinent references on immature stages, taxonomy, redescription, ecology, and keys. After the specific name entry are the original genus (if different from the present placement), type-locality, geographical distribution by State, Province, and broad extralimital units, explanatory notes, pertinent references to immature stages, taxonomy, redescription, and ecology, depository of type-specimen and its sex, and hosts.

In addition to the list under the map of faunal regions (inside back cover), the following abbreviations are used in this catalog:

#### ABBREVIATIONS, GENERAL

Amer. Bor.—America Borealis	Mus.—Museum
Amer. Sept.—America Septentrionalis	N. Amer.—North America
Autom.—Automatic	Orig. des.—Original designation
C. Amer.—Central America	Preocc.—Preoccupied
Co.—County	S. Amer.—South America
Cosmop.—Cosmopolitan	Sp.—Species
Design.—Designated	Subseq. monot.—Subsequent monotypy
F.—Female	Subsp.—Subspecies
Holarc.—Holarctic	Taut.—Tautonymy
Isl.—Island	Univ.—University
M.—Male	USA—United States of America
Mex.—Mexico	Var.—Variety
Monot.—Monotypy	W. Ind.—West Indies

#### MUSEUMS IN THE CONTINENTAL UNITED STATES AND CANADA<sup>1</sup>

AMNH—American Museum of Natural History, New York	FSCA—Florida State Collection, Gainesville
ANSP—Academy of Natural Sciences, Philadelphia, PA	HAHC—H. & A. Howden Collection, Ottawa, Canada
BYUC—Brigham Young University, Provo, UT	ICCM—Carnegie Museum, Pittsburgh, PA
CASC—California Academy of Sciences, San Francisco	INHS—Illinois Natural History Survey, Urbana
CISC—University of California, Berkeley	JGEC—J. G. Edwards Collection, San Jose, CA
CNCI—Canadian National Collections, Ottawa	KMFC—K. M. Fender Collection, McMinnville, OR
CUIC—Cornell University, Ithaca, NY	KSUC—Kansas State University, Manhattan
CWOB—C. W. O'Brien Collection, Tallahassee, FL	LACM—Los Angeles County Museum, CA
DHKC—D. H. Kistner Collection, Chico State College, CA	LSUC—Louisiana State University, Baton Rouge
ELSC—E. L. Sleeper Collection, Long Beach, CA	MCZC—Museum of Comparative Zoology, Harvard University, Cambridge, MA
FMNH—Field Museum of Natural History, Chicago, IL	MSUC—Michigan State University, East Lansing
	NCSM—North Carolina State University, Raleigh
	NYSM—New York State Museum, Albany
	OSEC—Oklahoma State University, Stillwater
	OSUC—Ohio State University, Columbus
	OSUO—Oregon State University, Corvallis

<sup>1</sup> Abbreviations for U.S. and Canadian museums abridged from Arnett, R. H., Jr., and Samuelson, G. A., 1969, "Dictionary of Coleoptera Collections of North America (Canada Through Panama)," Cushing-Malloy, Ann Arbor, MI, 123 pp.

PMNH—Peabody Museum, Yale University, New Haven, CT  
PSUC—Pennsylvania State Museum, University Park  
PURC—Purdue University, West Lafayette, IN  
RUIC—Rutgers University, New Brunswick, NJ  
SEMC—Snow Museum, University of Kansas, Lawrence  
SJSC—San Jose State College, CA  
SLWC—S. L. Wood Collection, Provo, UT

SMSH—Stovall Collection, University of Oklahoma, Norman  
TAMU—Texas A. & M. University, College Station  
UCDC—University of California, Davis  
UMMZ—University of Michigan, Ann Arbor  
UMRM—University of Missouri, Columbia  
USNM—U.S. National Museum of Natural History, Washington, DC  
WSUC—Washington State University, Pullman

#### MUSEUMS IN FOREIGN COUNTRIES

BMNH—British Museum (Natural History), London  
BPBM—Bernice P. Bishop Museum, Honolulu  
GUHC—Glasgow University, Hunterian College, Scotland  
HMOX—Hope Museum, Oxford, England  
HNHM—Hungarian Natural History Museum, Budapest  
IPZE—Institut Pflanzenschutzforschung Zweigstelle, Eberswalde, East Germany  
IRSB—Institut Royal Sciences Belge, Brussels  
MFNB—Museum für Naturkunde (Humboldt), Berlin  
MGFT—Museum G. Frey, Tutzing, Munich, West Germany  
MHNL—Museum d'Histoire Naturelle, Lyon, France  
MNHP—Museum National d'Histoire Naturelle, Paris  
MNSL—Museum of Natural Sciences, Leipzig, East Germany  
MZBS—Museum Zoologia, Barcelona, Spain

NHRS—Naturhistoriske Riksmuseet, Stockholm  
NMPC—Narodni Museum, Prague, Czechoslovakia  
SCUT—Spinola College, University of Turin, Italy  
SMTD—Staatliches Museum für Tierkunde, Dresden, East Germany  
UNAM—Universidad Nacional Autonoma, Mexico City  
UZMC—University Zoological Museum, Copenhagen, Denmark  
UZMH—University Zoological Museum, Helsinki, Finland  
ZMAS—Zoological Museum, Academy of Sciences, Leningrad  
ZMPA—Zoological Museum, Polish Academy of Sciences, Warsaw  
ZMUL—Zoological Museum, University of Lund, Sweden  
ZMUM—Zoological Museum, University of Moscow  
ZSBS—Zoologische Sammlung Bayerischen Staates, Munich, West Germany

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## Family CIIDAE

(Cisidae, Cissidae, Cioidae)

By J. F. Lawrence

The Ciidae is a relatively small family with about 40 genera and 550 described species occurring on all the major continents and most oceanic islands. The North American fauna consists of 85 species in 13 genera. The classification and generic arrangement used here are from Lawrence (1971, 1974b). According to Crowson (1960, 1966, 1967) and Lawrence (1971, 1974b), the ciids are primitive members of the Heteromera, with affinities to the Tetratomidae, Mycetophagidae, Prostomidae, and Pterogeniidae, but the relationships among these heteromeran families are still not clear. Although the two major subfamilies, Sphindociinae and Ciinae, appear to be well founded, the tribal classification within the latter group needs further study, and new genera remain to be described, especially from the Neotropical and Oriental regions. Much more work remains at the species level; this author has seen over 400 undescribed forms in collections. The North American fauna has been revised (Lawrence, 1971), but a few more species remain to be described from the Southeast. Although numerous larvae have been collected, few have been described to date. Work is continuing by this author on the phylogeny of the Ciidae and related families and on the biosystematics of various ciid genera.

Ciids are usually collected in the fruiting bodies of higher Basidiomycetes, especially the Polyporaceae (s. lat.), but some may be collected under bark or beaten from rotten branches or vines. Host preferences in the group have been discussed by Lawrence (1973).

This manuscript was received November 1975.

### Subfamily SPHINDOCIINAE

#### Genus SPHINDOCIS Fall

**Sphindocis** Fall, 1917: 170. Type-species: *Sphindocis denticollis* Fall (monot.).

TAXONOMY: Lawrence, 1974b: 1.

**denticollis** Fall, 1917: 171. CA: Alameda Co.; CA.

TYPE DEPOSITORY: MCZC.

IMMATURE STAGES: Lawrence, 1974b: 2-7.

TAXONOMY: Lawrence, 1971: 426, table 1 and 1974b: 1-14.

REDESCRIPTION: Lawrence, 1974b.

ECOLOGY: Lawrence, 1974a: 24 and 1974b: 1-2.

HOST: *Antrodia sepium*, *Tyromyces cinerascens*.

### Subfamily CIINAE

#### Tribe CIINI

##### Genus CIS Latreille

**Cis** Latreille, 1796: 50. Type-species: *Dermestes boleti* Scopoli (subseq. monot.: Latreille, 1802: 205).

**Eridaulus** Thomson, 1863: 191. Type-species: *Anobium nitidum* Fabricius (design. by Lawrence, 1971: 437).

**Macrocis** Reitter, 1878: 34. Type-species: *Macrocis taurus* Reitter (design. by Lawrence, 1971: 437).

**Xestocis** Casey, 1898: 85. Type-species: *Xestocis levettei* Casey (design. by Lawrence, 1965: 282).

TAXONOMY: Lawrence, 1965 and 1971.

REDESCRIPTION: Crowson, 1938: pl. 8, fig. 11 (metendosternite).

KEYS: Lawrence, 1971.

**acritus** Lawrence, 1971: 443, figs. 52, 63, 73, 80. AZ: Cochise Co., Rustler Park, 8 mi W. Portal; CA/ AZ NM.

TYPE DEPOSITORY: CASC.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Hirschioporus abietinus*.

**americanus** Mannerheim, 1852: 360. AK: Sitka; AK/ BC WA OR/ AB MB SD/ WI ON PQ/ NB NS/ CA NV/ UT CO/ NY PA/ ME NH VT MA/ TN NC.

TYPE DEPOSITORY: UZMH.

*insolens* Casey, 1898: 86 (*Xestocis*). PA.

TYPE DEPOSITORY: USNM.

*frosti* Dury, 1917: 9. ME: Orono.

TYPE DEPOSITORY: CMNH (lost).

*serricollis* Dury, 1917: 9. OR: Linn Co.

TYPE DEPOSITORY: CMNH.

*minor* Hatch, 1962: 232 (*Xestocis*). OR: Wheatland.

TYPE DEPOSITORY: USNM.

*oweni* Hatch, 1962: 232 (*Xestocis*). WA: Seattle.

TYPE DEPOSITORY: USNM.

*strigulosus* Hatch, 1962: 231 (*Xestocis*). WA: Seattle.

TYPE DEPOSITORY: USNM.

*nitidus* Hatch, 1962: 232 (*Xestocis*) (preoccupied Fabricius, 1792). OR: Wheatland.

TYPE DEPOSITORY: USNM.

*hatchi* Lawrence, 1971: 445 (replacement name for *nitidus* Hatch not Fabricius). OR: Wheatland.

*forsteri* Abdullah, 1973: 214 (unneeded replacement name for *nitidus* Hatch not Fabricius). OR: Wheatland.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Bjerkandera adusta*, *Piptoporus betulinus*, *Polyporus squamosus*, *Fomitopsis pinicola*, *Ganoderma* spp., various other Basidiomycetes.

**angustus** Hatch, 1962: 230. BC: Stanley; BC WA/ CA.

TYPE DEPOSITORY: CASC.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Fomitopsis pinicola*, *Laricifomes officinalis*, *Heterobasidion annosum*.

**biarmatus** Mannerheim, 1852: 360. AK: Sitka; AR/ BC WA OR/ CA.

TYPE DEPOSITORY: UZMH.

*bicarinatus* (error) LeConte, 1867: 58.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Fomitopsis pinicola*.

**castlei** (Dury), 1917: 17 (*Xestocis*). OH: Cincinnati; ON/ IA IL OH KY/ PA MD DC/ LA MS TN SC NC FL/ Mex., C. Amer.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Bjerkandera adusta*, *Polyporus mutabilis*, *Nigroporus vinosus*, *Trametes scabrosa*, various other Basidiomycetes.

**cayensis** Lawrence, 1971: 448. FL: Monroe Co., Big Pine Key; FL/ W. Ind.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Pogonomyces hydnoides*, *Inonotus porrectus*, *I. corrosus*, *Phellinus robiniae*, *Lopharia papyrina*.

**congestus** Casey, 1898: 82. LA; IL/ MD VA/ TX/ LA MS AL TN GA SC NC FL.

TYPE DEPOSITORY: USNM.

*lodgingi* Dury, 1917: 6. AL: Mobile.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus hirsutus*, *C. pinisitus*.

**cornelli** Lawrence, 1971: 450, figs. 42, 50, 67, 76, 79. NC: Carteret Co., Atlantic Beach; SC NC FL.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Hirschioporus sector*.

**cornutus** Blatchley, 1910: 898, fig. 353. IN: Posey Co., Grand Chain; IL IN OH/ NY PA NJ MD DC VA/ AR MS AL NC FL.

TYPE DEPOSITORY: PURC.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*, *C. subectypus*.

**creberrimus** Mellie, 1848: 357, pl. 12, fig. 5. LA: New Orleans; MN WI MI ON/ CA/ NE KS IA MO IL IN OH KY/ NY PA NJ MD DC WV VA/ VT MA/ AZ NM TX/ AR LA MS AL TN GA SC NC FL/ Mex., C. Amer., S. Amer., W. Ind.

TYPE DEPOSITORY: MNHP.

**puberulus** Mellie, 1848: 358. W. Ind.: Virgin Isls., St. Thomas.

TYPE DEPOSITORY: MNHP.

**nubillus** Gorham, 1898: 331. W. Ind.: St. Vincent, south end.

TYPE DEPOSITORY: BMNH.

**nubilus** (error) Dalla Torre, 1911: 15.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Bjerkandera adusta*, *Laricifomes officinalis*, *Ganoderma* spp., *Fomes sclerodermeus*, *Pogonomyces hydnoides*, *Trametes scabrosa*, various other Basidiomycetes.

**crinitus** Lawrence, 1971: 453, fig. 29. FL: Monroe Co., Lignum Vitae Key; LA AL GA NC FL/ W. Ind.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Lopharia papyrina*, *Coriolopsis fulvocinerea*, *Gloeophyllum striatum*, *Pogonomyces hydnoides*, *Ganoderma zonatum*.

**discolor** Lawrence, 1971: 455, figs. 44, 56, 62, 68, 81. AZ: Cochise Co., Rustler Park, 8 mi W. Portal; AZ.

TYPE DEPOSITORY: CASC.

ECOLOGY: Lawrence, 1973.

HOST: *Fomitopsis cajanderi*, *Antrodia sepium*.

**dunedinensis** Leng, 1918: 207 (replacement name for *pusillus* Dury). FL: Dunedin; FL/ W. Ind.

**pusillus** Dury, 1917: 10 (preoccupied Gorham, 1898). FL: Dunedin.

TYPE DEPOSITORY: CMNH.

**duplex** Casey, 1898: 82. CA; CA/ AZ NM/ Mex.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Dichomitus squalens*, *Fomitopsis pinicola*, *Laricifomes officinalis*, *Ganoderma oregonense*.

**ephippiatus** Mannerheim, 1853: 234. AK: Sitka; AK/ BC WA OR/ PQ/ CA NV/ WY CO/ NH VT.

TYPE DEPOSITORY: UZMH?.

**ephippium** (error) Dalla Torre, 1911: 10.

**moznettei** Dury, 1917: 16 (*Xestocis*). OR: Corvallis.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Fomitopsis pinicola*, *Ganoderma applanatum*, *G. brownii*, *Heterobasidion annosum*, *Piptoporus betulinus*, *Ischnoderma resinosum*, *Laetiporus sulphureus*, *Poria versipora*.

**festivulus** Lawrence, 1971: 459, figs. 47, 65, 72, 84. DC; MD DC VA.

TYPE DEPOSITORY: USNM.

**floridae** Dury, 1917: 9. FL: Key West; GA FL/ W. Ind.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus gilvus*, *Phellinus* sp., *Lopharia papyrina*.

**fuscipes** Mellie, 1848: 271, pl. 10, fig. 23. MA: Boston; NT/ BC WA OR ID/ AB SK MB MT ND/ MN MI ON PQ/ NS/ CA/ UT/ NE KS IA MO IL IN OH KY/ NY PA NJ MD DC WV VA/ ME NH VT MA RI CT/ TX/ AR LA MS AL TN GA SC NC FL/ W. Ind., Madeira. *C. fuscipes* is also known from Maui, Hawaii and from New Zealand.

TYPE DEPOSITORY: MNHP.

**atripennis** Mellie, 1848: 258, pl. 10, fig. 15. MA: Boston.

TYPE DEPOSITORY: MNHP.

*chevrolatti* Mellie, 1848: 249. LA: New Orleans.

TYPE DEPOSITORY: MNHP.

*dubius* Mellie, 1848: 273. LA: New Orleans.

TYPE DEPOSITORY: MNHP.

*caroliniae* Casey, 1898: 78. NC: Asheville.

TYPE DEPOSITORY: USNM.

*impressus* Casey, 1898: 79. BC: Vancouver Isl.

TYPE DEPOSITORY: USNM.

*pallens* Casey, 1898: 78. MT: Missoula.

TYPE DEPOSITORY: USNM.

IMMATURE STAGES: Boeving and Craighead, 1931: pl. 92.

TAXONOMY: Lawrence, 1967a.

ECOLOGY: Lawrence, 1967a, 1973 and 1974a.

HOST: *Coriolus versicolor*, *C. hirsutus*, *C. conchifer*, *C. pubescens*, *Lenzites betulina*, various other Polyporaceae.

*hirsutus* Casey, 1898: 83. FL: Lake Worth; FL/ W. Ind.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Ganoderma zonatum*, *Ganoderma* sp., *Pogonomyces hydnoides*, *Trametes scabrosa*, *Fomes sclerodermeus*, *Hirschioporus sector*, various other Basidiomycetes.

*horridulus* Casey, 1898: 81. PA: Westmoreland Co.; NT/ BC/ MB/ MN WI MI ON/ UT CO/ NY PA/ ME NH VT MA/ AZ NM/ NC.

TYPE DEPOSITORY: USNM.

*mormonicus* Casey, 1898: 81. UT: southwestern.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Hirschioporus pargamenus*, *H. abietinus*.

*huachucae* Dury, 1917: 8. AZ: Huachuca Mts., Miller Canyon; AZ TX/ Mex.

TYPE DEPOSITORY: CMNH.

*hystriculus* Casey, 1898: 82. CA: Lake Tahoe; BC WA OR/ CA.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Hirschioporus abietinus*, *Tyromyces cinerascens*, *Poria versipora*.

*krausi* Dalla Torre, 1911: 13 (replacement name for *bimaculatus* Kraus not Germain, not Sharp). TX: Victoria; TX/ GA FL.

*bimaculatus* Kraus, 1908: 76 (preoccupied Germain, 1855; Sharp, 1885). TX: Victoria.

TYPE DEPOSITORY: USNM.

*bicolor* Dury, 1917: 7 (preoccupied Sharp, 1879). GA: Tybee Isl.

TYPE DEPOSITORY: CMNH.

*duryi* Leng, 1918: 207 (replacement name for *bicolor* Dury not Sharp).

*laminatus* Mellie, 1848: 318, pl. 11, fig. 16. France: Montrieux, near Toulon; NY/ Europe.

TYPE DEPOSITORY: MNHP.

ECOLOGY: Lawrence, 1973.

HOST: *Cryptoporus volvatus*.

*levettei* (Casey), 1898: 85 (*Xestocis*). IN?: BC WA/ AB SK MB/ MN WI MI ON PQ/ NS NF/ CA/ CO/ KS IA MO IL IN KY OH/ NY PA NJ MD WV VA/ ME NH VT MA CT/ TX/ AL TN SC NC.

TYPE DEPOSITORY: USNM.

*levellei* (error) Dalla Torre, 1911: 20.

IMMATURE STAGES: Peterson, 1957: C5, C54.

ECOLOGY: Lawrence, 1973.

HOST: *Ganoderma applanatum*, *G. tsugae*, *G. lucidum*, *Fomes fomentarius*, *Fomitopsis pinicola*, *Oxyporus populinus*, various other Basidiomycetes.

*maritimus* (Hatch), 1962: 233 (*Xestocis*). OR: Ocean Park; BC WA OR/ MB/ CA.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Phaeolus schweinitzii*, *Phellinus pini*.

**megastictus** Lawrence, 1971: 465, figs. 39, 55, 64, 74, 78. CA: Plumas Co., Bucks Lake; CA.

TYPE DEPOSITORY: CASC.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Heterobasidion annosum*, *Fomitopsis pinicola*, *Laetiporus sulphureus*.

**miles** (Casey), 1898: 85 (*Xestocis*). PA: Westmoreland Co., St. Vincent; MO IL IN OH/ NY PA MD DC VA/ AR LA MS AL GA SC NC FL.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Lenzites betulina*, *Coriolus versicolor*, *C. subectypus*, *Fomitella supina*, *Stereum ostrea*.

**niedhauki** Lawrence, 1971: 467, fig. 5. FL: Monroe Co., Lignum Vitae Key; FL.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus robiniae*.

**pistoria** Casey, 1898: 79. RI: Boston Neck; NT/ AB SK MB/ MN WI ON PQ/ NY/ ME NH VT MA.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*, *C. pubescens*, *C. hirsutus*, *Bjerkandera adusta*.

**quadridentatus** (Dury), 1917: 17 (*Xestocis*). MA: Framingham; IA IL/ NY DC VA/ VT MA/ TX/ MS NC FL.

TYPE DEPOSITORY: CMNH.

**blatchleyi** Dury, 1917: 7. FL: Dunedin.

TYPE DEPOSITORY: PURC.

**robinophilus** Lawrence, 1971: 470, figs. 49, 61, 71, 83. OH: Hamilton Co., Preston; OH KY/ MD.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Trametes robiniphila*.

**rotundulus** Lawrence, 1971: 471, figs. 41, 51. SC: Colleton Co., Walterboro; TX/ AR LA MS AL GA SC NC FL.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Ganoderma lucidum*, *G. curtisii*, *Cyclomyces iodinus*, *Phellinus gilvus*, *Stereum ostrea*.

**stereophilus** Lawrence, 1971: 472, figs. 40, 53, 66, 77, 82. NC: Carteret Co., Atlantic Beach; PA NJ MD DC/ MA/ NC FL/ Mex.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Stereum ostrea*, *Stereum* sp.

**striolatus** Casey, 1898: 79. CO: Salida; NT/ BC OR/ MB ND SD/ MN MI ON PQ/ NS/ CA/ UT CO/ KS IL IN/ VA/ NH VT MA/ FL.

TYPE DEPOSITORY: USNM.

**fraternus** Casey, 1898: 80. UT: southwestern.

TYPE DEPOSITORY: USNM.

**macilentus** Casey, 1898: 80. CA: Lake Tahoe.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Hirschioporus abietinus*, *H. targamenus*, *Cerrena unicolor*, *Coriolus hirsutus*.

**subfuscus** Gorham, 1886: 357. Mex.: Cordova, Veracruz; TX/ Mex.

TYPE DEPOSITORY: BMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus hirsutus*, *Panellus stipticus*, *Lenzites elegans*.

**subtilis** Mellie, 1848: 353. N. Amer.; WI MI/ IL IN OH/ NY PA NJ MD DC VA/ NH MA CT/ TX/ AR LA MS AL GA SC NC FL.

TYPE DEPOSITORY: MNHP.

**confusus** Blatchley, 1910: 899. IN: Perry Co.

TYPE DEPOSITORY: PURC.

**julichi** Dury, 1917: 7. NY: New York City.

TYPE DEPOSITORY: CMNH.

*wenzeli* Dury, 1917: 8. PA: Delaware Co.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Hirschioporus pargamenus*, *H. sector*, *H. abietinus*, *Ganoderma applanatum*, *Phellinus gilvus*, *Bjerkandera adusta*, *Stereum ostrea*.

**tetracentrum** Gorham, 1886: 357. Mex.: Northern Sonora; CA/ AZ/ Mex.

TYPE DEPOSITORY: BMNH.

*arizonae* Dury, 1917: 5. AZ: Santa Rita Mts., Madera Canyon.

TYPE DEPOSITORY: OSUC?.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Coriolus versicolor*.

**tridentatus** Mannerheim, 1852: 360. AK: Sitka; AK/ BC WA OR/ CA.

TYPE DEPOSITORY: UZMH.

*ednae* Hatch, 1962: 232 (*Xestocis*). WA: Seattle.

TYPE DEPOSITORY: USNM.

*reflexus* Hatch, 1962: 232 (*Xestocis*). WA: Coupeville (Sunnyside).

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Fomitopsis pinicola*, *Ganoderma oregonense*, *Tyromyces cinerascens*, *Laetiporus sulphureus*, various other Basidiomycetes.

**tristis** Mellie, 1848: 343. LA: New Orleans; WI MI/ CO/ NE KS MO IL IN OH/ NY NJ DE MD WV VA/ MA/ TX OK/ LA MS AL GA SC NC FL/ Mex.

TYPE DEPOSITORY: MNHP.

*setulosus* Mellie, 1848: 257. N. Amer.

TYPE DEPOSITORY: Mus. Nat. His., Geneva.

*falli* Blatchley, 1910: 898. IN: Marion Co.

TYPE DEPOSITORY: PURC.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*, *C. maximus*, *C. hirsutus*, *Lenzites betulina*, *L. elegans*, *Funalia hispida*, various other Basidiomycetes.

**ursulinus** Casey, 1898: 83. AL; IN/ AR LA MS AL SC NC FL.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus gilvus*, *Ganoderma tsugae*, *Hirschioporus versatilis*, *Bjerkandera adusta*, *Laetiporus sulphureus*.

**versicolor** Casey, 1898: 80. CA: Calaveras Co.; OR/ CA/ AZ NM TX/ Mex.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Coriolus versicolor*, *C. hirsutus*, *Funalia hispida*, *Lenzites betulina*, *Pycnoporus cinnabarinus*, *Ganoderma brownii*, *Schizophyllum commune*.

**vitulus** Mannerheim, 1843: 299. CA; OR/ CA/ AZ.

TYPE DEPOSITORY: UZMH?.

*illistris* Casey, 1898: 81 (preoccupied Broun, 1880). CA: Humboldt Co.

TYPE DEPOSITORY: USNM.

*caseyi* Dalla Torre, 1911: 8 (replacement name for *illistris* Casey not Broun).

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Coriolus versicolor*, *Lenzites betulina*, *Bjerkandera adusta*, *Schizophyllum commune*.

### Genus ENNEARTHRON Mellie

**Ennearthron** Mellie, 1847: 110. Type-species: *Cis cornutus* Gyllenhal (design. by Desmarest, 1860: 261).

*Ennearthrum* (error) Bach, 1852: 111.

**aurisquamosum** Lawrence, 1971: 481, fig. 8. NC; OH KY/ NC.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Bjerkandera adusta*.

**spenceri** (Hatch), 1962: 233 (*Plesiocis*). BC: Vancouver; BC.

TYPE DEPOSITORY: USNM.  
ECOLOGY: Lawrence, 1973.  
HOST: *Cryptoporus volvatus*.

### Genus DOLICHOCIS Dury

**Dolichocis** Dury, 1919: 158. Type-species: *Dolichocis manitoba* Dury (monot.).

*Ennearthron*, of authors, in part, not Mellie.

TAXONOMY: Lawrence, 1965 and 1971.

KEYS: Lawrence, 1971.

**indistinctus** Hatch, 1962: 234. BC: Stanley; BC/ PQ/ CA/ CO/ VT/ AZ.

TYPE DEPOSITORY: CASC.  
ECOLOGY: Lawrence, 1973 and 1974a.  
HOST: *Fomitopsis pinicola*, *Antrodia serialis*, *Laricifomes officinalis*.

**manitoba** Dury, 1919: 158. MB: Aweme; NT/ BC OR ID/ AB MB SD/ WI ON PQ/ NB/ CA/ WY UT/ NY PA/ ME NH VT MA.

TYPE DEPOSITORY: CMNH.  
ECOLOGY: Lawrence, 1973 and 1974a.  
HOST: *Fomitopsis pinicola*, *Piptoporus betulinus*, *Heterobasidion annosum*, *Ganoderma applanatum*, *Laetiporus sulphureus*, *Laricifomes officinalis*, various other Polyporaceae.

### Genus ORTHOCIS Casey

**Orthocis** Casey, 1898: 84. Type-species: *Orthocis aterrima* Casey (design. by Lawrence, 1965: 288)  
*punctatus* (Mellie).

*Mellieicis* Lohse, 1964: 122 (as subgenus). Type-species: *Cis alni* Gyllenhal (orig. des.).

TAXONOMY: Lawrence, 1965 and 1971; Lohse, 1964.

KEYS: Lawrence, 1971.

**huesanus** Kraus, 1908: 77, pl. 3, fig. 3. FL: Key West; FL.

TYPE DEPOSITORY: USNM.

**longulus** Dury, 1917: 13. PA: Linglestown; KS/ PA/ TX/ LA MS AL FL/ Mex.

TYPE DEPOSITORY: CMNH.

**pulcher** Kraus, 1908: 78, pl. 3, fig. 4. FL: Key West; FL.

TYPE DEPOSITORY: USNM.

**punctatus** (Mellie), 1848: 337 (*Cis*). N. Amer.; AK NT/ BC WA OR/ AB MB SD/ WI MI ON PQ/ NF/ CA/ KS IN OH/ NY PA NJ MD DC WV VA/ ME NH MA/ NM TX/ AR LA MS AL TN GA SC NC FL.

TYPE DEPOSITORY: MNHP.

**aterrimus** Casey, 1898: 84. CA: Alameda Co.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Auricularia auricula*.

**transversatus** (Kraus), 1908: 79, pl. 3, fig. 7 (*Ennearthron*). FL: Crescent City; VA/ TX/ LA AL GA FL.

TYPE DEPOSITORY: USNM.

**pallidus** Kraus, 1908: 79, pl. 3, fig. 6 (*Ennearthron*). FL: Haw Creek.

TYPE DEPOSITORY: USNM (lost).

### Genus STRIGOCIS Dury

**Strigocis** Dury, 1917: 18. Type-species: *Strigocis opacicollis* Dury (monot.).

TAXONOMY: Lawrence, 1971: 488.

KEYS: Lawrence, 1971: 489.

**bilimeki** (Reitter), 1878a: 33 (*Cis*). Mex.; AZ/ Mex. Arizona record needs confirmation.

TYPE DEPOSITORY: MNHP.

ECOLOGY: Lawrence, 1973.

HOST: *Lenzites betulina*, *Coriolus versicolor*.

**opacicollis** Dury, 1917: 20. OH: Cincinnati; MI ON/ KS MO IL IN OH KY/ NY PA NJ MD DC VA/ NH VT MA CT/ AR MS AL TN GA SC NC FL/ Mex.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*, *C. tenuis*, *C. subectypus*, *C. pinisitus*, *C. maximus*, *C. hirsutus*, *Lenzites betulina*, *Pycnoporus sanguineus*, various other Polyporaceae.

**opalescens** (Casey), 1898: 86 (*Xestocis*). PA: Westmoreland Co., St. Vincent; MI/ OH KY/ NY PA MD DC WV VA/ MS NC/ Mex.

TYPE DEPOSITORY: USNM.

**davisi** Dury, 1917: 16 (*Xestocis*). NY: Staten Island.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*.

### Genus HADRAULE Thomson

**Hadraule** Thomson, 1863: 182. Type-species: *Cis elongatulus* Gyllenhal (monot.).

*Maphoca* Casey, 1900: 165. Type-species: *Maphoca blaisdelli* Casey (monot.).

*Maphaea* (error) Dalla Torre, 1911: 21.

*Diphyllocis*, of authors, in part, not Reitter.

*Pityocis* Peyerimhoff, 1918: 141. Type-species: *Pityocis coarctatus* Peyerimhoff (monot.) *elongatula* (Gyllenhal).

*Knablia* Roubal, 1936: 53. Type-species: *Cis elongatulus* Gyllenhal (monot.).

TAXONOMY: Lawrence, 1965 and 1971.

KEYS: Lawrence, 1971.

**blaisdelli** (Casey), 1900: 165 (*Maphoca*). CA: Calaveras Co., Mokelumne Hill; BC OR/ MI/ CA/ UT/ IA OH/ MA CT/ AZ NM TX/ FL/ Mex. Records from IA, MA, and CT are based on herbarium infestations.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Gloeophyllum saeparium*, *Daedaleopsis confragosa*, *Funalia hispida*, *Coriolus biformis*, *Dichomitus squalens*, *Bjerkandera adusta*, various other Polyporaceae.

**elongatula** (Gyllenhal), 1827: 627 (*Cis*). Sweden: Sparrsaetra Westrogothiae; NB/ Old World.

TYPE DEPOSITORY: Zool. Univ. Mus., Uppsala.

**striata** Sahlberg, 1901: 11 (*Ennearthron*). Finland: southern.

TYPE DEPOSITORY: UZMH?

**coarctata** Peyerimhoff, 1918: 142 (*Pityocis*). Algeria: Ain-Haouas, near Djelfa.

TYPE DEPOSITORY: MNHP.

ECOLOGY: Lawrence, 1973.

HOST: *Piptoporus betulinus*.

**explanata** Lawrence, 1971: 493, fig. 21. ME: Washington Co., E. Machias; ME.

TYPE DEPOSITORY: CASC.

### Genus PLESIOCIS Casey

**Plesiocis** Casey, 1898: 87. Type-species: *Plesiocis cribrum* Casey (monot.).

TAXONOMY: Lawrence, 1971.

**cribrum** Casey, 1898: 87. CA: Calaveras Co., Mokelumne Hill; BC WA OR ID/ AB MB MT/ WI MI PQ/ CA NV/ WY UT CO/ NY PA VA/ ME MA/ AZ NM.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Cryptoporus volvatus*, *Dichomitus squalens*, *Hapalopilus alboluteus*.

### Genus CERACIS Mellie

**Ceracis** Mellie, 1848: 375 (as subgenus). Type-species: *Ennearthron sallei* Mellie (design. by Lawrence, 1967b: 95).

TAXONOMY: Lawrence, 1967b.

KEYS: Lawrence, 1967b and 1971.

**californicus** (Casey), 1884: 36 (*Ennearthron*). CA; WA OR/ CA NV/ UT CO/ NE/ DC/ CT/ AZ NM/ Mex.

TYPE DEPOSITORY: USNM.

**convergens** Casey, 1898: 89 (*Ennearthron*). CA: Los Angeles.

TYPE DEPOSITORY: USNM.

**discolor** Casey, 1898: 89 (*Ennearthron*). CA: Sonoma Co.

TYPE DEPOSITORY: USNM.

**grossulus** Casey, 1898: 89 (*Ennearthron*). CA: southern.

TYPE DEPOSITORY: USNM.

**coloradensis** Dury, 1917: 22 (*Ennearthron*). CO: Grand Lake, Middle Park.

TYPE DEPOSITORY: CMNH.

**oregonus** Dury, 1917: 22 (*Ennearthron*). OR: Corvallis.

TYPE DEPOSITORY: CMNH.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b, 1973 and 1974a.

HOST: *Ganoderma brownii*, *G. applanatum*, *G. lobatum*, *Ganoderma* spp., *Coriolus versicolor*, *Bjerkandera adusta*, *Funalia hispida*, various other Basidiomycetes.

**curtus** (Mellie), 1848: 367, pl. 12, fig. 15 (*Ennearthron*). Cuba: Havana; PA/ TX/ FL/ W. Ind.

TYPE DEPOSITORY: MNHP.

**obesus** Mellie, 1848: 335, pl. 11, fig. 13 (*Cis*). N. Amer.

TYPE DEPOSITORY: Mus. Nat. His., Geneva.

**compactus** Dury, 1917: 21 (*Ennearthron*). FL: Key West.

TYPE DEPOSITORY: CMNH.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Pogonomyces hydnoides*, *Fomes sclerodermeus*.

**dixiensis** (Tanner), 1934: 47 (*Octotemnus*). UT: Zion N. P.; CA/ UT/ AZ NM TX/ Mex.

TYPE DEPOSITORY: BYUC.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b, 1973 and 1974a.

HOST: *Funalia hispida*, *Ganoderma* sp.

**magister** Lawrence, 1971: 498. FL: Monroe Co., Lignum Vitae Key; FL.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus robiniae*.

**minutissimus** (Mellie), 1848: 334, pl. 11, fig. 12 (*Cis*). MA: Boston; MI/ IN OH KY/ PA NJ/ NH MA/ AL.

TYPE DEPOSITORY: MNHP.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

HOST: *Cerrena unicolor*, *Coriolus versicolor*, *Bjerkandera adusta*.

**minutus** Dury, 1917: 25. FL: Palm Beach; TX/ FL/ W. Ind.

TYPE DEPOSITORY: CMNH.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Coriolus pinisitus*, *C. maximus*, *Pogonomyces hydnoides*, *Coriolopsis occidentalis*, *Pycnoporus sanguineus*, various other Basidiomycetes.

**monocerus** Lawrence, 1967b: 115 (replacement name for *unicorn* Casey not Gorham). FL; LA FL/ W. Ind.

**unicornis** Casey, 1898: 90 (*Ennearthron*) (preoccupied Gorham, 1898). FL.

TYPE DEPOSITORY: USNM.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Pycnoporus sanguineus*.

**multipunctatus** (Mellie), 1848: 368, pl. 12, fig. 16 (*Ennearthron*). Cuba; AL FL/ W. Ind.

TYPE DEPOSITORY: ?.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Ganoderma zonatum*, *G. appланatum*, *G. lucidum*, *Fomes sclerodermeus*, *Pogonomyces hydnoides*, *Fomitella supina*.

**nigropunctatus** Lawrence, 1967b: 118, fig. 16. LA: Iberville Par., 4 mi S. Grosse Tete; TX/ LA/ Mex., C. Amer.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Pogonomyces hydnoides*, *Fomes sclerodermeus*, *Ganoderma* sp., *Coriolus hirsutus*.

**obrieni** Lawrence, 1967b: 119, fig. 25. AZ: Santa Cruz Co., 2 mi S. W. Patagonia; AZ/ Mex.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus gilvus*.

**pecki** Lawrence, 1971: 499. FL: Jackson Co., Florida Caverns State Park; IL/ MD VA/ FL.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Melanoporia nigra*.

**powelli** Lawrence, 1967b: 120, fig. 23. AZ: Cochise Co., Rustler Park, 8 mi W. Portal; AZ/ Mex.

TYPE DEPOSITORY: MCZC.

ECOLOGY: Lawrence, 1973.

HOST: *Hirschioporus abietinus*, *H. targamenus*.

**pullulus** (Casey), 1898: 90 (*Ennearthron*). FL; LA AL TN GA SC NC FL/ W. Ind.

TYPE DEPOSITORY: USNM.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Phellinus gilvus*, *P. licnoides*, *Inonotus porrectus*, *Inonotus* spp., *Melanoporia nigra*, *Cyclomyces iodinus*, *Ganoderma zonatum*, various other Polyporaceae.

**punctulatus punctulatus** Casey, 1898: 90. FL; FL.

TYPE DEPOSITORY: USNM.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Pogonomyces hydnoides*, *Phellinus licnoides*, *P. gilvus*, *Ganoderma zonatum*, *Ganoderma* sp.

**punctulatus rubriculus** Lawrence, 1967b: 124, fig 13. MO: Boone Co., 10 mi S. Columbia; MI/ KS IA MO IL IN OH KY/ NY PA NJ MD DC VA/ VT MA/ TX/ AR LA MS AL TN GA SC NC FL/ W. Ind.

TYPE DEPOSITORY: MCZC.

*sallei*, of authors, in part, not Mellie.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus gilvus*, *Pogonomyces hydnoides*, *Fomes fomentarius*, *Inonotus radiatus*, *Ganoderma* spp., various other Polyporaceae.

**quadricornis** Gorham, 1886: 359. Mex.: Tuxtla; TX/ Mex., C. Amer.

TYPE DEPOSITORY: BMNH.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Coriolus maximus*, *C. hirsutus*, *Coriolopsis occidentalis*, *C. crocata*, *Trametes scabrosa*, *T. cinnabarina*, *Pogonomyces hydnoides*.

**sallei** (Mellie), 1848: 377, pl. 12, fig. 22 (*Ennearthron*). LA: New Orleans; WI MI ON PQ/ NE KS IA MO IL IN OH KY/ NY PA NJ MD WV VA/ VT MA CT/ TX OK/ AR LA AL TN GA NC FL.

TYPE DEPOSITORY: MNHP.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Ganoderma applanatum*, *G. curtisii*, *G. lobatum*, *G. zonatum*, *Pogonomyces hydnoides*, *Fomes sclerodermeus*, *Oxyporus populinus*, various other Polyporaceae.

**schaefferi** Dury, 1917: 25. TX: Brownsville; TX/ Mex.

TYPE DEPOSITORY: CMNH.  
TAXONOMY: Lawrence, 1967b.  
REDESCRIPTION: Lawrence, 1967b.  
ECOLOGY: Lawrence, 1967b and 1973.  
HOST: *Ganoderma* sp.

**singularis** (Dury), 1917: 14 (*Xestocis*). OH: Cincinnati; MN WI MI ON/ NE IA IL IN OH KY/ NY PA MD DC VA/ MA/ TX OK/ AR LA MS AL TN SC NC FL/ C. Amer.

TYPE DEPOSITORY: CMNH.  
TAXONOMY: Lawrence, 1967b.  
REDESCRIPTION: Lawrence, 1967b.  
ECOLOGY: Lawrence, 1967b and 1973.  
HOST: *Phellinus gilvus*, *P. ignarius*, *P. robiniae*, *P. ribis*, *Phellinus* spp., *Melanoporia nigra*, *Ganoderma* spp., *Gloeophyllum saeparium*, various other Polyporaceae.

**thoracicornis** (Ziegler), 1845: 270 (*Cis*). Carolina; MB/ MN WI MI ON PQ/ NE KS IA MO IL IN OH KY/ NY PA NJ MD DC VA/ ME NH VT MA RI CT/ TX/ AR LA MS AL TN GA SC NC FL.

TYPE DEPOSITORY: MCZC.

*mellyi* Mellie, 1848: 369 (*Ennearthron*). N. Amer.

TYPE DEPOSITORY: Mus. Nat. His., Geneva.

*pumicatus* Mellie, 1848: 333, pl. 11, fig. 11 (*Cis*). LA: New Orleans.

TYPE DEPOSITORY: MNHP.

*unicolor* Casey, 1884: 37 (*Ennearthron*). NY: Long Isl., Willet's Point.

TYPE DEPOSITORY: USNM.

*laminifrons* Casey, 1898: 89 (*Ennearthron*). LA: Morgan City.

TYPE DEPOSITORY: USNM.

*piceus* Casey, 1898: 88 (*Ennearthron*). TX: Columbus.

TYPE DEPOSITORY: USNM.

*oblongus* Blatchley, 1910: 900 (*Ennearthron*). IN: Marion Co.

TYPE DEPOSITORY: PURC.

*thoracicicus* (error) Dalla Torre, 1911: 19.

*bifoveatus* Dury, 1917: 26. OH: Cincinnati.

TYPE DEPOSITORY: CMNH.

*thoracicinus* (error) Sherborn, 1931: 6493.

IMMATURE STAGES: Boeing and Craighead, 1931: pl. 92.

TAXONOMY: Lawrence, 1967b.

REDESCRIPTION: Lawrence, 1967b.

ECOLOGY: Lawrence, 1967b and 1973.

HOST: *Hirschioporus targamenus*, *H. abietinus*, *H. sector*, *Lenzites betulina*, *L. elegans*, *Coriolus versicolor*, *Fomitella supina*, *Bjerkandera adusta*, various other Basidiomycetes.

### Genus SULCACIS Dury

**Sulcacinis** Dury, 1917: 20. Type-species: *Sulcacinis lengi* Dury (design. by Lawrence, 1965: 278).

*Entypus* Redtenbacher, 1847: 350 (preoccupied Dahlbom, 1843). Type-species: *Cis affinis* Gyllenhal (monot.). Type species was misidentified as *Apate fronticornis* Panzer.  
*Entypocis* Lohse, 1964: 121 (as subgenus). Type-species: *Cis bidentulus* Rosenhauer (orig. des.).

TAXONOMY: Lawrence, 1965 and 1971.

KEYS: Lawrence, 1971.

**curtulus** (Casey), 1898: 83 (*Cis*). NY; BC WA OR ID/ AB SK MB MT ND/ WI MI PQ/ CA NV/ WY UT CO/ NE IA MO IL IN/ NY PA NJ MD/ NH MA CT/ AZ NM/ NC.

TYPE DEPOSITORY: USNM.

*montana* Casey, 1898: 82 (*Cis*). MT: Missoula.

TYPE DEPOSITORY: USNM.

*sorror* Casey, 1898: 83 (*Cis*). BC: Vancouver Isl., Victoria.

TYPE DEPOSITORY: USNM.

*cylindricus* Dury, 1917: 8 (*Cis*). OR: Umatilla Co.

TYPE DEPOSITORY: CMNH.

*niger* Dury, 1917: 21. IL: southern.

TYPE DEPOSITORY: CMNH.

*criddlei* Dury, 1919: 158 (*Cis*). MB: Aweme.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Coriolus versicolor*, *C. hirsutus*, *Lenzites betulina*, *Funalia hispida*, *Bjerkandera adusta*, *Pycnoporus sanguineus*, various other Basidiomycetes.

*lengi* Dury, 1917: 21. VT: Bennington Co.; MI/ KS IA MO IL IN OH/ NY PA NJ MD DC VA/ ME NH VT MA/ TX/ AR MS SC NC.

TYPE DEPOSITORY: CMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Coriolus versicolor*, *C. pubescens*, *C. hirsutus*, *Lenzites betulina*.

### Genus MALACOCIS Gorham

**Malacocis** Gorham, 1886: 356. Type-species: *Malacocis championi* Gorham (monot.).

*Brachycis* Casey, 1898: 86. Type-species: *Brachycis brevicollis* Casey (monot.).

TAXONOMY: Lawrence, 1971.

*brevicollis* (Casey), 1898: 87 (*Brachycis*). NY: Ithaca; MB/ MN WI ON PQ/ KS IA MO IL IN OH KY/ NY PA NJ MD DC WV/ ME NH VT MA/ TX OK/ LA MS AL TN GA SC NC FL.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973.

HOST: *Phellinus gilvus*, *P. ignarius*, *P. laevigatus*, *P. licnoides*, *P. pini*, *P. robiniae*, *P. robustus*, *Phellinus* spp., *Inonotus corosus*, various other Polyporaceae.

### Tribe OROPHIINI

#### Genus RHOPALODONTUS Mellie

**Rhopalodontus** Mellie, 1847: 109 (justified emendation). Type-species: *Cis perforatus* Gyllenhal (monot.).

*Ropalodontus* Mellie, 1847: 109 (original spelling, emended). Type-species: *Cis perforatus* Gyllenhal (monot.).

TAXONOMY: Lawrence, 1971.

*americanus* Lawrence, 1971: 507, figs. 25, 31, 59. WI: Oneida Co., Woodruff; WI.

TYPE DEPOSITORY: FMNH.

ECOLOGY: Lawrence, 1973.

HOST: *Piptoporus betulinus*, *Hapalopilus fibrillosus*, *Russula* sp.

#### Genus OCTOTEMNUS Mellie

**Octotemnus** Mellie, 1847: 110. Type-species: *Cis glabriculus* Gyllenhal (design. by Jacquelin du Val, 1861: 239).

TAXONOMY: Lawrence, 1971.

*laevis* Casey, 1898: 91. RI; AK/ BC WA OR/ AB SK MB/ MN WI MI ON PQ/ NS/ CA/ KS IA IL IN OH KY/ NY PA NJ MD DC WV VA/ ME NH VT MA RI CT/ AL TN NC.

*denudatus* Casey, 1898: 91. CA.

TYPE DEPOSITORY: USNM.

ECOLOGY: Lawrence, 1973 and 1974a.

HOST: *Coriolus versicolor*, *C. pubescens*, *C. hirsutus*, *C. conchifer*, *Lenzites betulina*, *Ganoderma applanatum*, *Bjerkandera adusta*, various other Basidiomycetes.

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Names are indexed as follows:

CAPITALS: All names for taxa above the generic level;

**Boldface:** Valid generic and subgeneric names;

Roman: Valid specific and subspecific names;

*Italic:* All invalid names such as synonyms, nomina nuda, and extra-limital taxa even though valid.

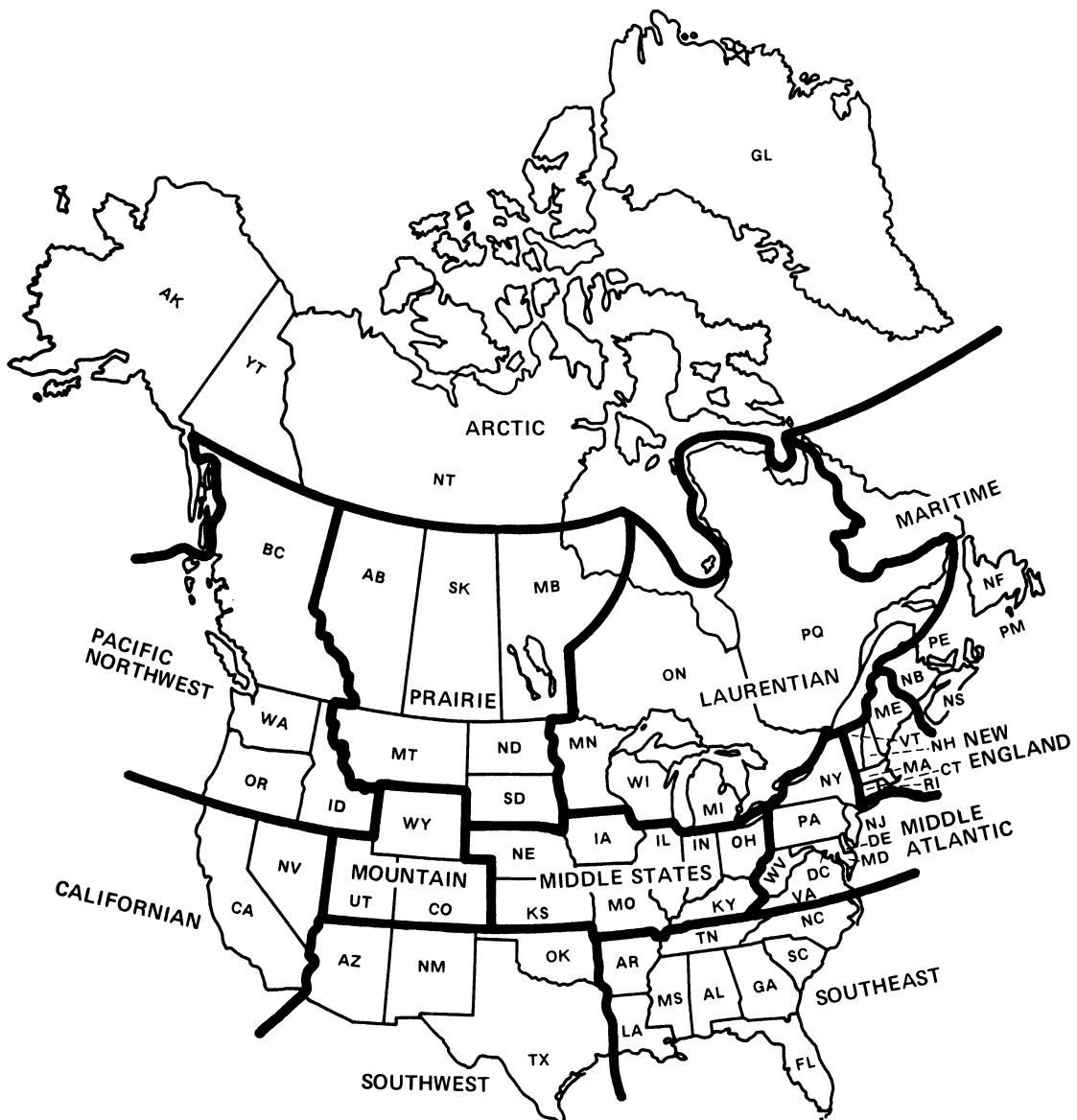
Parentheses around an author's name indicate that the specific name has been transferred from its original genus. The generic name following the author's name indicates the present placement of the species. Synonyms of species-group names are listed with the original spelling.

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 CA California  
 CO Colorado  
 CT Connecticut  
 DC District of Columbia  
 DE Delaware  
 FL Florida  
 GA Georgia  
 GL Greenland  
 IA Iowa  
 ID Idaho  
 IL Illinois  
 IN Indiana  
 KS Kansas  
 KY Kentucky  
 LA Louisiana  
 MA Massachusetts

MB Manitoba  
 MD Maryland  
 ME Maine  
 MI Michigan  
 MN Minnesota  
 MO Missouri  
 MS Mississippi  
 MT Montana  
 NB New Brunswick  
 NC North Carolina  
 ND North Dakota  
 NE Nebraska  
 NF Newfoundland  
 NH New Hampshire  
 NJ New Jersey  
 NM New Mexico  
 NS Nova Scotia  
 NT Northwest Territories  
 NV Nevada  
 NY New York  
 OH Ohio  
 OK Oklahoma

ON Ontario  
 OR Oregon  
 PA Pennsylvania  
 PE Prince Edward Island  
 PM St. Pierre-Miquelon  
 PQ Quebec  
 RI Rhode Island  
 SC South Carolina  
 SD South Dakota  
 SK Saskatchewan  
 TN Tennessee  
 TX Texas  
 UT Utah  
 VA Virginia  
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 WA Washington  
 WI Wisconsin  
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